CLAIMS

What is claimed is:

1. A method of displaying one or more periodically updated channels of electronic information received over a network from a content server, the method comprising the computer-implemented steps of:
receiving and storing at the client, channel selection information defining a subset of channels that are selected from among a plurality of available content channels;
periodically retrieving updated channel content for the subset of channels from a content server across a public network, without communicating the channel selection information across the network;
generating one or more electronic documents that contain the updated channel content;
displaying the one or more electronic documents.

2. A method as recited in Claim 1, further comprising the steps of creating and storing at the client, virtual space organization information defining an organization of content for the subset of channels within a virtual display space, and wherein the step of generating one or more electronic documents comprises the step of generating one or more electronic documents that contain the updated channel content based on the virtual space organization information.

3. A method as recited in Claim 2, wherein the step of periodically retrieving updated channel content further comprises the steps of:
receiving an update specification for one channel among the subset of selected channels;
identifying an update method and time value within the update specification;
in accordance with the update specification, issuing a request for updated content data created after the time value, using the update method.

4. A method as recited in Claim 1, further comprising the steps of receiving information defining a plurality of rendering contexts, wherein each of the rendering contexts is associated with one of the selected channels, and wherein the step of generating one or more electronic documents comprises the step of rendering the electronic documents using the rendering context that is associated with one of the selected channels from which the updated channel content was obtained.

5. A method as recited in Claim 4, wherein each rendering context comprises a style sheet, template, script, helper reference, or applet.

6. A method as recited in Claim 4, wherein the rendering context comprises a Cascading Style Sheet document, the updated channel content comprises HTML data, and wherein the generating step comprises combining the rendering context with the updated channel content to result in creating and storing an HTML page that is capable of display by a browser.

7. A method as recited in Claim 4, wherein the rendering context comprises a script, and wherein the generating step comprises applying the updated channel content to the script as input, executing the script, and receiving output from the script that is capable of display by a browser.

8. A method as recited in Claim 7, wherein the steps of receiving, retrieving, generating, and displaying are carried out by a personal server that is executed at the client, and wherein the script is executed by an embedded processor in the personal server.

9. A method as recited in Claim 4, wherein the rendering context comprises a reference to a program that is stored at the client, and wherein the generating step comprises executing the program using the updated channel content as input and receiving output from the program that is capable of display by a browser.

10. A method as recited in Claim 4, wherein the rendering context comprises an applet, and wherein the generating step comprises executing the applet using the updated channel content as input and displaying programmatic output from the applet using a browser.

11. A method as recited in Claim 1, further comprising the steps of:
identifying whether the updated channel content contains an identification of an embedded channel;
requesting second updated channel content for the embedded channel.

12. A method as recited in Claim 1, wherein the step of generating one or more electronic documents further comprises the steps of:
receiving the updated channel content, a virtual space specification, and a page organization specification;
replacing one or more tokens in the updated channel content with other content information;
iterating the replacing step over all updated channel content for all channels that are identified in the channel selection information.

13. A method as recited in Claim 1, wherein the step of generating one or more electronic documents further comprises the steps of
receiving the updated channel content, a virtual space specification, and a page organization specification;
receiving information defining a plurality of rendering contexts, wherein each of the rendering contexts is associated with one of the selected channels;
replacing one or more tokens in the updated channel content with other content information;
iterating the replacing step over all updated channel content for all channels that are identified in the second information;

creating one or more static content elements in an electronic document based on a rendering context that is associated with one of the selected channels from which the updated channel content was obtained.

14. A method as recited in Claim 1, wherein the steps of receiving, storing, retrieving, generating, and displaying are carried out by a personal server that executes at the client.

15. A method as recited in Claim 1, further comprising the step of generating and displaying a user interface display that includes a list of available channels, wherein the list of available channels is created based on issuing a query to a channel database that is stored in association with a personal server executed at the client that carries out the generating and displaying steps.

16. A method as recited in Claim 1, further comprising the step of generating and displaying a user interface display that includes a list of available channels, wherein the list of available channels is created based on issuing a query to a channel database that is stored in association with a personal server executed at the client that carries out the generating and displaying steps, and based on a user-specific channel topology that is retrieved from the channel database.

17. A method as recited in Claim 1, further comprising the steps of rescheduling the retrieving step when the updated channel content cannot be retrieved immediately.

18. A method as recited in Claim 1, wherein displaying the one or more electronic documents comprises the steps of delivering the electronic documents from a personal server executed in the client to a browser executed in the client over a TCP/IP loopback interface of the client.

19. A method as recited in Claim 1, wherein displaying the one or more electronic documents comprises the steps of:
providing a Web server and a browser in association with the client;
loading one or more virtual display spaces from a personal server that is provided in the client;
generating a view of the one or more virtual display spaces by using the browser to request the one or more virtual display spaces from the Web server over a loopback interface of the client.

20. A method as recited in Claim 19, wherein the step of generating a view includes the step of directing the browser to display information located at a hostname that is associated with the loopback interface of the client.

21. A method as recited in Claim 19, further comprising the steps of:
binding the Web server of the client to a pre-defined port that is associated with the loopback interface of the client;
placing the Web server in a listening mode;
using the browser, issuing a display request to a hostname that is associated with the loopback interface.

22. A method as recited in Claim 19, further comprising the steps of:
examining an IP address of the request;
determining whether requests from the IP address are permitted to view the virtual display space, based on a stored mapping of IP addresses to identifiers of virtual display spaces;
generating a view of the electronic documents from virtual display space only when requests from the IP address are permitted to view the virtual display space.

23. A method as recited in Claim 19, further comprising the steps of:
rendering the requested one or more electronic documents from the loaded virtual display space using a Web page synthesizer that is provided in the personal server;
providing the rendered one or more electronic documents to the Web server;
serving the rendered one or more electronic documents from the Web server to the browser over the loopback interface.

24. A method as recited in Claim 19, wherein the embedded Web server is a proxy server that binds to an arbitrary port.

25. A method of displaying one or more periodically updated channels of electronic information received over a network from a content server, the method comprising the computer-implemented steps of:
selecting a subset of channels that are selected from among a plurality of available content channels;
periodically retrieving and aggregating updated channel content for the subset of channels from a content server across a public network, without communicating the channel selection information across the network;
organizing a virtual display space for receiving the updated channel content;
generating one or more electronic documents that contain the updated channel content;
presenting the one or more electronic documents.

26. A computer-readable medium carrying one or more sequences of instructions for displaying one or more periodically updated channels of electronic information received over a network from a content server, which instructions, when executed by one or more processors, cause the one or more processors to carry out the steps of:

receiving and storing at the client, channel selection information defining a subset of channels that are selected from among a plurality of available content channels;

periodically retrieving updated channel content for the subset of channels from a content server across a public network, without communicating the channel selection information across the network;

generating one or more electronic documents that contain the updated channel content;

displaying the one or more electronic documents.

27. An apparatus for displaying one or more periodically updated channels of electronic information received over a network from a content server, comprising:

means for receiving and storing at the client, channel selection information defining a subset of channels that are selected from among a plurality of available content channels;

means for periodically retrieving updated channel content for the subset of channels from a content server across a public network, without communicating the channel selection information across the network;

means for generating one or more electronic documents that contain the updated channel content;

means for displaying the one or more electronic documents.

28. An apparatus for displaying one or more periodically updated channels of electronic information received over a network from a content server, comprising:

a network interface that is coupled to the data network for receiving one or more packet flows therefrom;

a processor;

one or more stored sequences of instructions which, when executed by the processor,

cause the processor to carry out the steps of:

receiving and storing at the client, channel selection information defining a subset of channels that are selected from among a plurality of available content channels;

periodically retrieving updated channel content for the subset of channels from a content server across a public network, without communicating the channel selection information across the network;

generating one or more electronic documents that contain the updated channel content;

displaying the one or more electronic documents.

29. A personal server capable of displaying one or more periodically updated channels of electronic information received over a network from a content server, comprising:

a channel manager configured to receive and store, in a channel database of the personal server, channel selection information defining a subset of channels that are selected from among a plurality of available content channels, and to periodically retrieve updated channel content for the subset of channels from a content server across a public network, without communicating the channel selection information across the network;

a page synthesizer configured to generate one or more electronic documents that contain the updated channel content and to provide the one or more electronic documents to a browser for display.

30. A personal server as recited in Claim 29, further comprising:

a virtual space designer configured to receive and store virtual space organization information defining an organization of content for the subset of channels within a virtual display space;

a virtual space manager configured to generate one or more electronic documents that contain the updated channel content based on the virtual space organization information in coordination with the page synthesizer.